

ABSTRACT OF THE DISCLOSURE

Wheels, bearings, or other rotating elements are used to decrease friction in artificial joint components associated with knee and hip replacements, artificial ankles, elbows, wrist, finger joints, toe joints, and intervertebral discs. One or more seals may be used to trap debris inside the artificial joint. The seal may surround the periphery of the component(s), and may be used to hold a fluid within the joint. Various fluids or lubricants are applicable to these embodiments, including water or aqueous solutions, triglyceride oil, soybean oil, an inorganic oil (e.g. silicone oil or fluorocarbon), glycerin, ethylene glycol, or other animal, vegetable, synthetic oil, or combinations thereof could be used. The seal could be made of an expandable elastomer such as those used in medical devices for the cardiovascular system.